

**Abstract**

The invention concerns a process for manufacturing a Micro-Electro-Mechanical-System (MEMS) comprising the use of a sacrificial layer, the process being  
10 characterized by the fact that the sacrificial layer is made of silicon.

The invention also concerns MEMS devices such as SG-MOSEFT, MEMS switches or MEMS tunable capacitors which may be obtained according to the previous cited process.